Comparative statement

Government of Karnataka

Form No. PWG-45

BBMP. Dasarahalli Division Estimate Amount: 99.00 Lakhs

Name of The Work: **Improvements to Roads and drains at Katarayanagara in Ward No.14, Bagalagunte, Dasarahalli Sub Division**

Name of Agency: **KRIDL** (Modified)

Sl	Description of Item	Unit	As per Sanction Estimate			As per Tender			Total Executed Qty	Qty Executed upto 125%			Qty Executed Above 125% more than tender Qty			Total Amount	Amount		Remarks
			Qty	Rate	Amount	Qty	Rate	Amount		Qty	Rate	Amount	Qty	Rate	Amount		Excess	Savings	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	KSRRB M200-13.1. Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. II. By Mechanical Means. A. Cement Concrete Grade M-15 &M-20. MORTH Specification No. 202	Cum	6.75	413.40	2790.00	6.75	413.40	2790.00	6.750	6.750	413.40	2790.00	0.00	413.40	0.00	2790.00	0.00	0.00	
2	KSRRB 300-1. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.	Cum	268.46	137.80	36994.00	268.46	137.80	36994.00	268.743	268.743	137.80	37033.00	0.00	137.80	0.00	37033.00	39.00	0.00	
3	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1. 00 km and complete as per specifications.	Cum	612.33	43.46	26612.00	612.33	43.46	26612.00	632.578	632.578	43.46	27492.00	0.00	43.46	0.00	27492.00	880.00	0.00	
4	KSRB 4-1.7: Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC @ 220kgs, with 20mm and down size graded granite metal coarse aggregates @0.69 cum and fine aggregtes @ 0.56cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications.	Cum	44.28	5714.97	253059.00	44.28	5714.97	253059.00	45.193	45.193	5714.97	258274.00	0.00	5714.97	0.00	258274.00	5215.00	0.00	
5	KSRRB M2200-5.12. Providing and laying Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.7 cum and fine aggregates @ 0.47 cum, with superplastisiser @ 3lts confirming to IS9103-1999 Reaffirmed-2008. i) Upto 5 m height	Cum	50.40	5775.37	291079.00	50.40	5775.37	291079.00	63.000	63.000	5775.37	363848.00	0.00	5775.37	0.00	363848.00	72769.00	0.00	
6	KSRRB M2200-6. Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per disign (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification. MORTH Specification No.1600 & 2200 -do- TMT Bars Fe 500	Tonne	3.02	72326.98	218427.00	3.02	72326.98	218427.00	3.179	3.179	72326.98	229926.00	0.00	72326.98	0.00	229926.00	11499.00	0.00	
7	Removing and resetting of footpath slab	Sqm	252.00	208.82	52623.00	252.00	208.82	52623.00	253.800	253.800	208.82	52999.00	0.00	0.00	0.00	52999.00	376.00	0.00	
8	KSRB 15.2.2 : Providing ruled pointing 20 mm deep to stone slab pavements with cement mortar 1:3, 20mm deep, after raking joints nicely lining, including cost of materials, labour, curing complete as per specifications.	Sqm	72.00	49.06	3532.00	72.00	49.06	3532.00	72.000	72.000	49.06	3532.00	0.00	49.06	0.00	3532.00	0.00	0.00	
	Providing and fixing Precast RCC cover slabs of 100 mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement and pointing for joints 1:3 cement mortor including form work, lift charges , curing and concrtee finished surface on both sides etc, and complete as per the directions of Enginner in charges. (Data Rate)	Sqm	211.50	1615.00	341573.00	211.50	1615.00	341573.00	213.030	213.030	1615.00	344043.00	0.00	1615.00	0.00	344043.00	2470.00	0	

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10	**Dismantling of cement concrete pavement by mechanical means** using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials separately complete as per specifications.	Cum	82.50	952.94	78618.00	82.50	952.94	78618.00	86.653	86.653	952.94	82575.00	0.00	952.94	0.00	82575.00	3957.00	0.00			
11	KSRRB 300-48. Scarifying kankar / gravel / metal crust by mechanical means upto 150mm thick, disposal of stuff including cost of all labour charges, HOM complete as per specifications.	Sqm	550.00	25.44	13992.00	550.00	25.44	13992.00	577.685	577.685	25.44	14696.00	0.00	25.44	0.00	14696.00	704.00	0.00			
12	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications.	Sqm	1616.00	6.36	10278.00	1616.00	6.36	10278.00	577.685	577.685	6.36	3674.00	0.00	6.36	0.00	3674.00	0.00	6604.00			
13	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/trap/basalt material, mixing by mix in place method by rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications.	Cum	159.90	1855.00	296615.00	159.90	1855.00	296615.00	193.286	193.286	1855.00	358546.00	0.00	1855.00	0.00	358546.00	61931.00	0.00			
14	KSRRB M600-1.Providing and Constructing dry lean cement concrete mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1 ,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a hatching plant, transported to site,laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. Clause 601of MORTH V Revision and IS 456 Table-5 -do- with OPC at 150 kg/cum and coarse aggregate 0.86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with fixed form paver.	Cum	55.00	3944.51	216948.00	55.00	3944.51	216948.00	74.047	68.750	3944.51	271185.00	5.30	3944.51	20894.00	292879.00	196053.93	0.00			
15	Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications	Cum	468.78	2001.28	938160.00	468.78	2001.28	938160.00	471.392	471.392	2001.28	943387.00	0.00	2001.28	0.00	943387.00	5227.00	0.00			
16	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to18:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades,textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per	Cum	88.00	5354.02	471154.00	88.00	5354.02	471154.00	92.430	92.430	5354.02	494870.00	0.00	5354.02	0.00	494870.00	23716.00	0.00			
17	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials, labour, HOM complete as per specifications. Clause 501 of MORTH V revision (PW,P& IWTD SR 2018-19, Pg No 158, Item No. 21.2)	Sqm	3592.50	5.30	19040.00	3592.50	5.30	19040.00	3618.00	3618.00	5.30	19175.00	0.00	5.30	0.00	19175.00	135.00	0.00			

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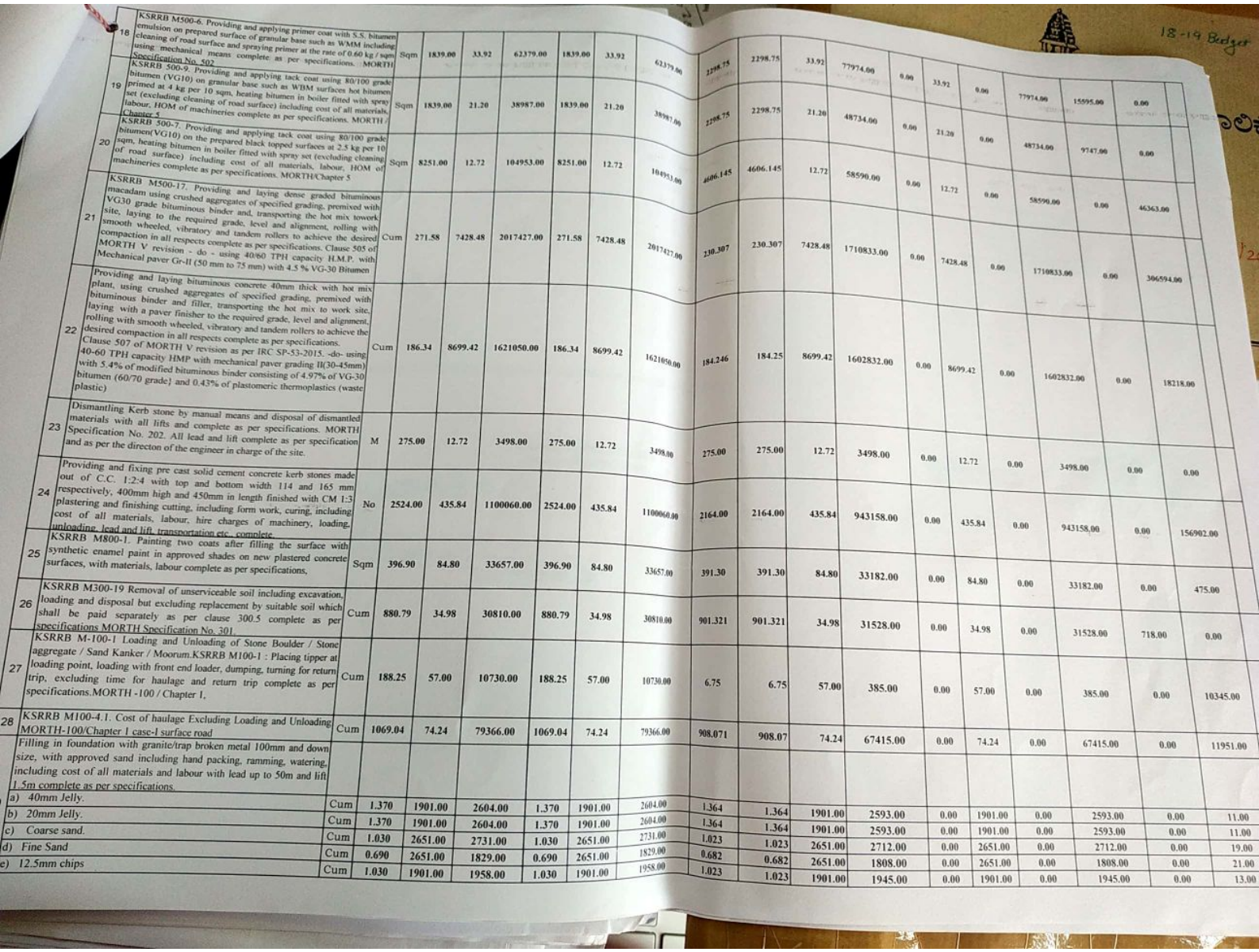

18	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502	Sqm	1839.00	33.92	62379.00	1839.00	33.92	62379.00	2298.75	2298.75	33.92	77974.00	0.00	33.92	0.00	77974.00	15595.00	0.00		
19	KSRRB 500-9. Providing and applying tack coat using 80/100 grade bitumen (VG10) on granular base such as WBM surfaces hot bitumen primed at 4 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH / Chapter 5	Sqm	1839.00	21.20	38987.00	1839.00	21.20	38987.00	2298.75	2298.75	21.20	48734.00	0.00	21.20	0.00	48734.00	9747.00	0.00		
20	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5	Sqm	8251.00	12.72	104953.00	8251.00	12.72	104953.00	4606.145	4606.145	12.72	58590.00	0.00	12.72	0.00	58590.00	0.00	46363.00		
21	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix towork site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 505 of MORTH V revision - do - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen	Cum	271.58	7428.48	2017427.00	271.58	7428.48	2017427.00	230.307	230.307	7428.48	1710833.00	0.00	7428.48	0.00	1710833.00	0.00	306594.00		
22	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. -do- using 40-60 TPH capacity HMP with mechanical paver grading II(30-45mm) with 5.4% of modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic)	Cum	186.34	8699.42	1621050.00	186.34	8699.42	1621050.00	184.246	184.25	8699.42	1602832.00	0.00	8699.42	0.00	1602832.00	0.00	18218.00		
23	Dismantling Kerb stone by manual means and disposal of dismantled materials with all lifts and complete as per specifications. MORTH Specification No. 202. All lead and lift complete as per specification and as per the direction of the engineer in charge of the site.	M	275.00	12.72	3498.00	275.00	12.72	3498.00	275.00	275.00	12.72	3498.00	0.00	12.72	0.00	3498.00	0.00	0.00		
24	Providing and fixing pre cast solid cement concrete kerb stones made out of C.C. 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc. complete.	No	2524.00	435.84	1100060.00	2524.00	435.84	1100060.00	2164.00	2164.00	435.84	943158.00	0.00	435.84	0.00	943158.00	0.00	156902.00		
25	KSRRB M800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications,	Sqm	396.90	84.80	33657.00	396.90	84.80	33657.00	391.30	391.30	84.80	33182.00	0.00	84.80	0.00	33182.00	0.00	475.00		
26	KSRRB M300-19 Removal of unserviceable soil including excavation, loading and disposal but excluding replacement by suitable soil which shall be paid separately as per clause 300.5 complete as per specifications MORTH Specification No. 301.	Cum	880.79	34.98	30810.00	880.79	34.98	30810.00	901.321	901.321	34.98	31528.00	0.00	34.98	0.00	31528.00	718.00	0.00		
27	KSRRB M-100-1 Loading and Unloading of Stone Boulder / Stone aggregate / Sand Kanker / Moorum.KSRRB M100-1 : Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications.MORTH -100 / Chapter 1,	Cum	188.25	57.00	10730.00	188.25	57.00	10730.00	6.75	6.75	57.00	385.00	0.00	57.00	0.00	385.00	0.00	10345.00		
28	KSRRB M100-4.1. Cost of haulage Excluding Loading and Unloading MORTH-100/Chapter 1 case-I surface road	Cum	1069.04	74.24	79366.00	1069.04	74.24	79366.00	908.071	908.07	74.24	67415.00	0.00	74.24	0.00	67415.00	0.00	11951.00		
	Filling in foundation with granite/trap broken metal 100mm and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with lead up to 50m and lift 1.5m complete as per specifications.																			
	a) 40mm Jelly.	Cum	1.370	1901.00	2604.00	1.370	1901.00	2604.00	1.364	1.364	1901.00	2593.00	0.00	1901.00	0.00	2593.00	0.00	11.00		
	b) 20mm Jelly.	Cum	1.370	1901.00	2604.00	1.370	1901.00	2604.00	1.364	1.364	1901.00	2593.00	0.00	1901.00	0.00	2593.00	0.00	11.00		
	c) Coarse sand.	Cum	1.030	2651.00	2731.00	1.030	2651.00	2731.00	1.023	1.023	2651.00	2712.00	0.00	2651.00	0.00	2712.00	0.00	19.00		
	d) Fine Sand	Cum	0.690	2651.00	1829.00	0.690	2651.00	1829.00	0.682	0.682	2651.00	1808.00	0.00	2651.00	0.00	1808.00	0.00	21.00		
	e) 12.5mm chips	Cum	1.030	1901.00	1958.00	1.030	1901.00	1958.00	1.023	1.023	1901.00	1945.00	0.00	1901.00	0.00	1945.00	0.00	13.00		

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30	Supplying, laying and jointing HDPE pipes of specified grade and conforming to IS 4984- 995 with latest amendments and conveyingto work site including loading and unloading at both destinations and rolling and lowering into trenches, laying true to line and jointing of pipes and specials, giving hydraulic test as per relevant ISS with all lead and lifts including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation, testing and commissioning. The rate is exclusive of required specials and fittings wherever necessary like saddle Tee, stub ends, flanged sets, bends, reducers etc. complete (Contractor will make his own arrangements for procuring water for testing) etc. for : HDPE Grade PE80-PN6.0, 630 mm dia. **(Perforated Pipe for Rain Water Harvesting Pit)**	Rmt	19.80	10822.32	214282.00	19.80	10822.32	214282.00	19.800	19.800	10822.32	214282.00	0.00	10822.32	0.00	214282.00	0.00	0.00	
31	Providing of Geonets for Rain Water Harvesting pit on top of the filter media as specified in drawings or as approved by Engineer Incharge.	Sqm	3.43	71.03	244.00	3.43	71.03	244.00	3.410	3.410	71.03	242.00	0.00	71.03	0.00	242.00	0.00	2.00	
	TOTAL CONSTRUCTION COST				8600663.00			8600563.00								8332440.00			
																8332440.00	2901110.00	557529.00	

1) Estimated amount	9900000.00
2) Schedule-B Amount	8600663.00
3) Work Slip Amount	2901110.00
Percentage of Workslip (3)/(2)	3.37%
4) Total expenditure incured to the project	8332440.00
5)Savings with respect to schedule B amount	557529.00
% Savings with respect to schedule B amount(5/2)*100	6.48
% Savings with respect to Estimate Amount (5/1)*100	5.63

Since the overall expenditure is lesser then Schedule-B amount. The Work slip may please be approved as executed items quantity variation is less than 125%

Assistant Engineer
W-14

Assistant Executive Engineer
Dasarahalli Sub-Division

Executive Engineer
Dasarahalli Division

Approved

25/11/2020

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